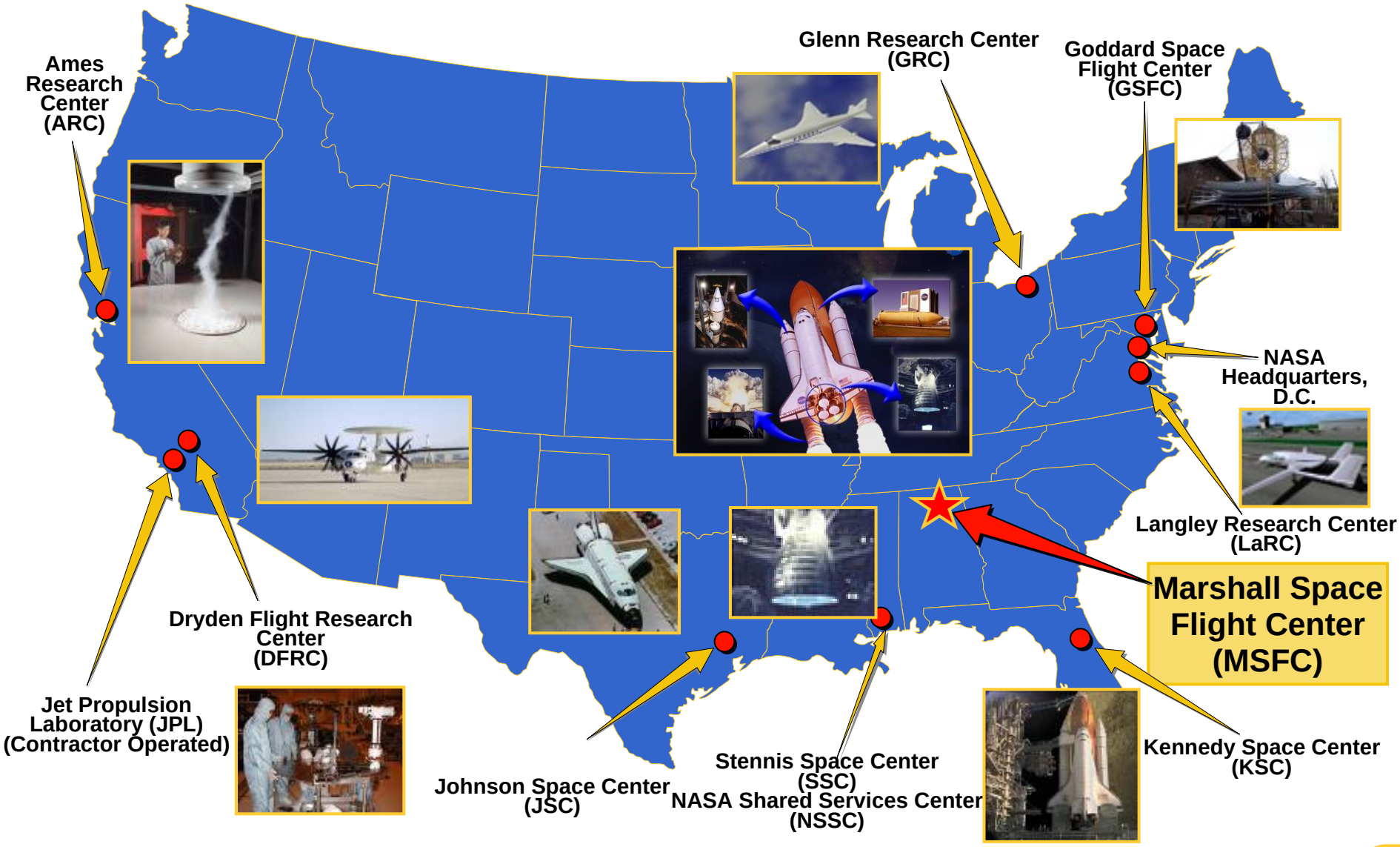
Doing Business with NASA/ George C. Marshall Space Flight Center

Presenter: Mr. David E. Brock, MSFC Small Business Specialist

5 August 2008

2nd Annual East Tennessee Veterans Conference

NASA Centers Nationwide



NASA Organization

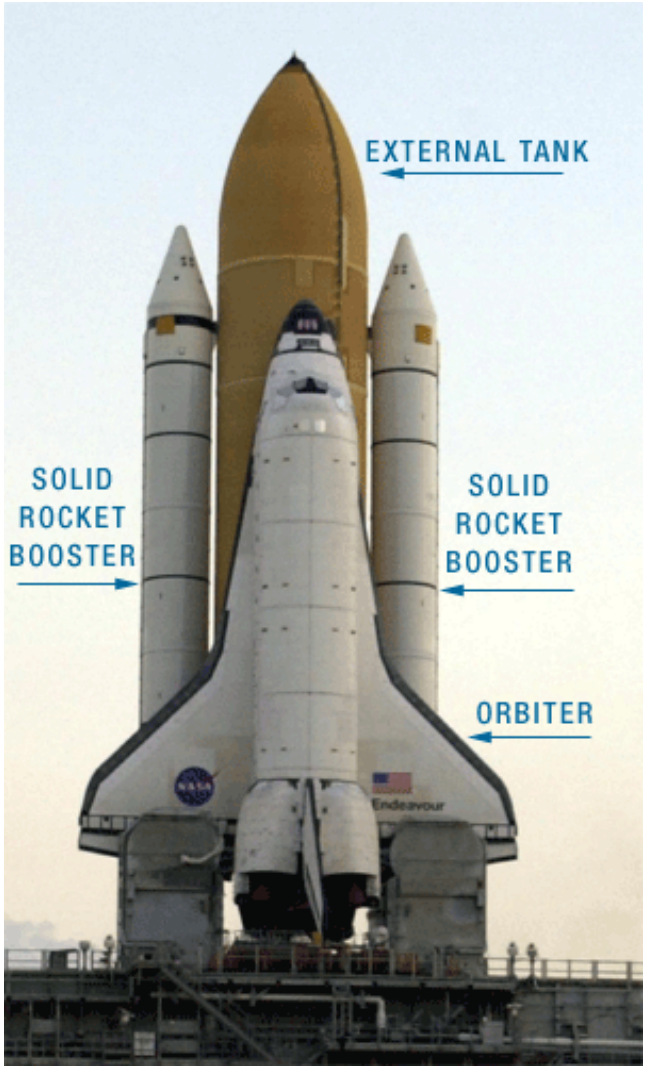
- **Four Mission Directorates and Ten Centers**

- **Space Operations**
  - Johnson Space Center
  - Marshall Space Flight Center
  - Kennedy Space Center
  - Stennis Space Center
- **Aeronautics**
  - Langley Research Center
  - Glenn Research Center
  - Dryden Flight Research Center
- **Science**
  - Goddard Space Flight Center
  - Ames Research Center
  - Jet Propulsion Laboratory (JPL) – Cal Tech
- **Exploration Systems**
  - Various

Vision for Space Exploration

- Goal 1: Safely fly the Shuttle until its retirement in 2010.
- Goal 2: Complete the International Space Station in a manner consistent with NASA's International Partner commitments and the needs of human exploration.
- Goal 3: Develop a balanced overall program of science, exploration, and aeronautics with the focus on exploration.
- Goal 4: Bring a new Crew Exploration Vehicle into service as soon as possible after Shuttle retirement.
- Goal 5: Encourage the pursuit of appropriate partnerships with the emerging commercial space sector.
- Goal 6: Establish a human lunar return program with an eye for later human missions to Mars and other destinations.

Space Shuttle Program



- The world's first reusable spacecraft, and the first spacecraft in history that can carry large satellites both to and from orbit.
- Launches like a rocket, maneuvers in Earth orbit like a spacecraft and lands like an airplane.
- Orbits the earth at 115 to 400 statute miles with a velocity of over 17,321 mph
- **The most reliable launch record of any rocket now in operation**. Since 1981, it has boosted more than 1.36 million kilograms (3 million pounds) of cargo into orbit. More than 600 crew members have flown on its missions.

International Space Station Program

- Altitude: ~200 miles above earth
- Velocity: 17,240 MPH, completing 15.7 orbits per day
- Joint project between United States (NASA), Russia (RKA), Japan (JAXA), Canada (CSA), several European countries (ESA), and Brazil (AEB).
- World-class research platform for biomedical, biotechnology, fluid physics, material science, quantum physics, astronomy and meteorology.
- Permanently manned since November 2, 2000. Visited by over 137 people to date.

Marshall Space Flight Center

Integral to NASA's Future - 45 Years Providing America's Space Solutions

Our Property

- Center occupies 1,841 acres of property within the 38,000 acre perimeter of the Redstone Arsenal in Huntsville, Alabama
- Adjacent to Cummings Research Park; the University of Alabama, Huntsville; and the U.S. Space and Rocket Center

Our Staff

- The Center employs about 6,500 people onsite (~2,500 Civil Service and 4,000 contractors)

Our Space

- The Center occupies 237 buildings and structures that occupy 4.5 million square feet of technical and office space

Our Impact:

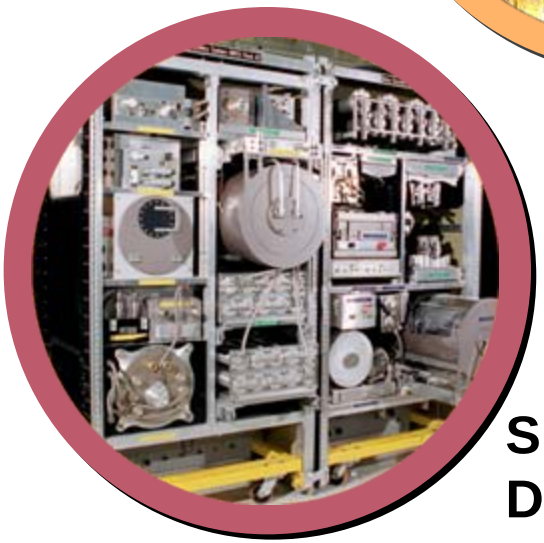
Budget of $2.2B/year

MSFC's Product Lines/Competencies

Our Product Lines Are Integral to NASA's Mission & Enabling Exploration

Space Transportation & Propulsion Systems

Scientific Spacecraft Instruments & Research



Space Systems Development & Integration

Advanced Materials & Manufacturing Processes

MSFC Focus on Shuttle & Station

Space Shuttle – 25 years of flight

- External tank
- Main engines
- Reusable solid rocket boosters
- Reusable solid rocket motors

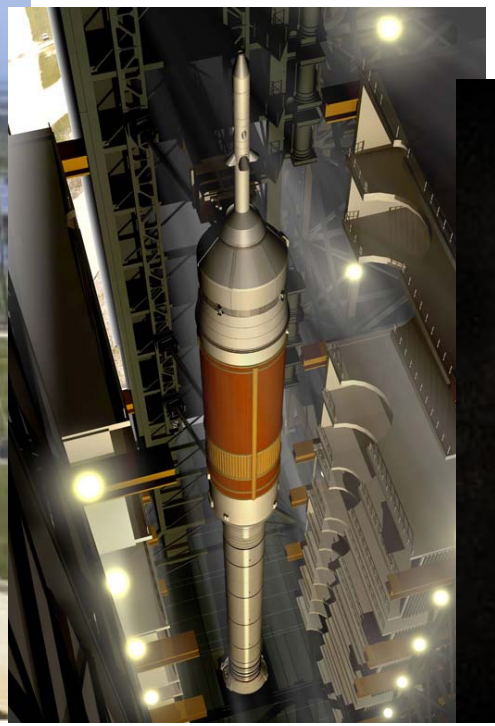


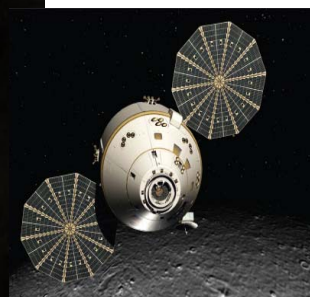
International Space Station 7 years of habitation

- Payload Operations Center – Science management
- Node 2 (connector module) & Node 3 (life support module)
- Multi-Purpose Logistic Modules
- Environmental Control & Life Support Systems
- Microgravity Science Glovebox
- Space Station Materials Science Research Rack


Project Constellation

- **NASA's Constellation Program is building the next generation of spacecraft for human exploration.**
  - The Orion Crew Exploration Vehicle (CEV) will launch on the Ares I rocket.
  - The Ares V will launch cargo.





Ares I 2007 Contract Awards

PROGRAM	COMPETITION	CONTRACT #	AWARD RECIPIENTS(S)
First Stage	Sole Source	NNM07AA75C	ATK Launch Systems
First Stage Roll & Control Engine Thrusters	Unrestricted	NNM07AA83C	Aerojet
Upper Stage Instrument Unit Avionics	Unrestricted	NNM08AA16C	The Boeing Company
J2-X Engine	Unrestricted	NNM06AB13C	Pratt & Whitney Rocketdyne
Upper Stage Production	Unrestricted	NNM07AB03C	The Boeing Company
Upper Stage Pre-Valves	Unrestricted	NNM07AA86C- Moog NNM07AA87C-Vacco	Moog, Inc. Vacco Industries
Upper Stage Vent & Relief Valves	Unrestricted	NNM07AA91C	Vacco Industries

MSFC Competitive Acquisition Projections (24Months)

POP Expires	Incumbent	Title	Value	Anticipated Competition	RFP Release
02/28/2010	SAIC, Inc.	Engineering Cost Analysis Technologies Development	$15.0M	Full & Open	October 2009
11/30/2009	None	NASA Integrated Communications Services	TBD	Full & Open	November 2008
11/30/2009	SAIC, Inc.	Marshall Information Technology Services	TBD	TBD	November 2008
11/30/2009	None	NASA Business Applications (IEMP)	TBD	Full & Open	November 2008

MSFC Competitive Acquisition Projections (24 Months)

POP Expires	Incumbent	Title	Value	Anticipated Competition	RFP Release
03/31/2010	SEI Group	Facilities Engineering Design Services	$20.0M	SBA 8(a)	October 2009
09/08/2010	Great Southern Engineering	Environmental Engineering Services	$25.0M (not to exceed)	A&E SB Set-Aside	February 2010
09/30/2010	Digital Fusion Solutions, Inc.	Acquisition and Business Support Services	$50.0M	GSA Logworld SB Set-Aside	January 2010
10/14/2010	Jacobs Technology	Engineering, Scientific, and Technical Services	$500.0M	Full & Open	November 2009

Ares V

- Earth Departure Stage
- Earth Departure Stage J-2X Engine
- Core Stage
- Core Stage Reusable Solid Rocket Boosters
- RS-68 Engine (cluster of five)
- Shroud
- System Integration

NASA Centers

- Have individual Industry Assistant Offices
- Have dedicated Small Business Specialist(s)
- Engage in outreach efforts
- Do procurement independently of other Centers

SBS Assistance

- Provide organizational overviews
- Identify marketable areas
- Provide names of key procurement & technical contacts
- Familiarize businesses with various business development programs
- Discuss NASA’s prime contractor subcontracting programs
- Discuss future acquisitions

First Visit

- Present a summary of the company's core competencies
- Provide a brief overview of the company's business classification(s) and size
- Provide a brief overview of the company's past performance

When Pursuing Competitive Acquisitions

- Start the marketing process 18 to 24 months prior to the period of performance expiration date
- Let the SBS know of your interest
- Review the statement of work (if available)
- Respond to sources sought/request for information
- Closely review draft request for proposals
- Attend industry briefings and participate in site visits

Other Things to Consider

- Competition Type
- North American Industry Classification System (NAICS) Code and size standard to be utilized
- Level of subcontracting (if applicable)
- Request for proposal (RFP)/ request for quote (RFQ) release date
- Key procurement and technical contacts

Other Things to Consider (Cont.)

- How does the Company's core competencies align with the statement of work
- Ask questions and present capabilities to key procurement and technical personnel
- Make competitive determination (Prime or Subcontractor)
- Establish teaming relationships (if applicable)

Doing Business with the George C. Marshall Space Flight Center Web Site

http://ec.msfc.nasa.gov/msfc/doin_bus.html

- Contacts
- Assistance
- Calendar of Events

- NASA Acquisition Internet Service
- NASA Acquisition Internet Service Online Registration

Doing Business with the George C. Marshall Space Flight Center- Marketing Tools

- Acquisition Planning Tool
- MSFC Prime Contractor List
- MSFC Support Contracts List
- MSFC Small Business Coordinators
- Acquisition Forecast

Doing Business with the George C. Marshall Space Flight Center- Special Programs

- Small Business Innovation Research Program
- Small Business Technology Transfer Program

Doing Business with the George C. Marshall Space Flight Center- Small Business Directories

- MSFC Small Business Directory
- MSFC Hardware Fabrication, Machining, and Assembly Services Directory
- Small Business Product Offerings Directory
- Small Business Innovative Research Vendor Web Site

Doing Business with the George C. Marshall Space Flight Center- Other Links

- Marshall Prime Contractor Supplier Council (MPCSC)
- Marshall Small Business Alliance (MSBA)

Desirable Contractor Attributes

- Team player
- Customer focus
- Reasonable cost
- Good safety record
- Relevant experience
- Reliable, responsive, and flexible

Keys To Success

- Planning: Your Roadmap To Success:

  "Absent planning In One's Life or Business is like a ship upon the sea without a rudder" (*Earl Nightingale*)

  - Planning Primary Reason For Business Failures

- Build A Dream Team:

  - Need A Team To Obtain A Dream
  - Attract To Your Team The Best, Keenest and Brightest
  - Team Is "Together Everyone Achieves Miracles"

- Network Your Way To Success:

  - Your Network Will Determine Your Net Worth
  - You Have To Make Contacts To Make Contracts
  - Create Relationships With Hinges That Never Rust

MSFC Small Business Program Contacts

CONTACT	TITLE	EMAIL	PHONE
David Brock	Small Business Specialist	David.e.brock@nasa.gov	256-544-0267
Fran Thompson	Management Support Assistance	Fran.thompson@nasa.gov	256-544-8816
Stefanie Funghi	Digital Fusion Contractor Support	Stefanie.m.funghi@nasa.gov	256-544-6263
Lynn Garrison	Small Business Technical Advisor	Virginia.l.garrison@nasa.gov	256-544-6719